CLAIMS

1.   An image display system of environment-compliant type
which corrects a color of an image and displays the image, based
5 on visual environment information generated by visual
environment detection means which detects a visual environment
in a display region of the image, the image display system
comprising:

colored-light information processing means which _150_
(ambient light of display)
10 converts a given color within the visual environment
information into a coordinate value within a given color space,
→ grey/color pair
and obtains a coordinate value forming a complementary color
pair with the converted coordinate value, based on a coordinate
value within the given color space of the given color within
15 a given reference environment and the converted coordinate
value; and
(DOP)
correction means which corrects input-output
characteristic data for display that is used by means of
displaying the image, based on the obtained coordinate value
20 forming the complementary color pair.

2.   The image display system as defined by claim 1,
wherein the colored-light information processing means
obtains an inverse vector of a bound vector that indicates a
25 coordinate position of the converted coordinate value within
the color space, as the coordinate value forming the
complementary color pair, and

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wherein the correction means corrects the input-output characteristic data, using the obtained inverse vector as a correction value.

5   3.   The image display system as defined by claim 2,

wherein the correction means performs gamma correction as correction of the input-output characteristic data, based on the coordinate value forming the complementary color pair.

10   4.   The image display system as defined by claim 3,

wherein the colored-light information processing means obtains coordinate values of a plurality of complementary color pairs for each given grayscale unit.

15   5.   The image display system as defined by claim 4,

wherein the visual environment detection means comprises means which detects the visual environment by measuring at least ambient light.

20   6.   A presentation system of environment-compliant type which corrects a color of a presentation image and displays the presentation image, adapting to a visual environment, the presentation system comprising:

visual environment detection means which detects the
25   visual environment within a display region of the presentation image, and creates visual environment information;

colored-light   information   processing   means   which

converts the visual environment information into a coordinate value within a given color space, and obtains a coordinate value forming a complementary color pair with the converted coordinate value, based on a coordinate value within the given color space of the given color within a given reference environment and the converted coordinate value;

correction means which corrects input-output characteristic data for display that is used by means of displaying the image, based on the obtained coordinate value forming the complementary color pair; and

display means which displays the presentation image, based on the corrected input-output characteristic data.

7.   The presentation system as defined by claim 6, wherein the correction means performs gamma correction as correction of the input-output characteristic data, based on the coordinate value forming the complementary color pair.

8.   The presentation system as defined by claim 7, wherein the display region is a region on a screen, and wherein the display means comprises projection means which projects the presentation image towards the screen.

9.   The presentation system as defined by claim 8, wherein the visual environment detection means detects a visual environment that takes into account a type of the screen.

10.   The presentation system as defined by claim 9,

wherein the visual environment detection means comprises

means which detects the visual environment by measuring at least

5   ambient light.

11.   An image processing method of environment-compliant type

which corrects a color of an image adapting to a visual

environment, the method comprising:

10   a step of detecting a visual environment;

a conversion step of converting the detected visual

environment into a coordinate value within a given color space;

a coordinate-value calculation step of obtaining a

coordinate value forming a complementary color pair with a

15   coordinate value converted by the conversion step, based on a

coordinate value within the given color space of the given color

in a given reference environment and the converted coordinate

value;

a correction step of correcting input-output

20   characteristic data for display, based on the obtained

coordinate value forming the complementary color pair; and

a step of displaying an image, based on the corrected

input-output characteristic data.

25   12.   The image processing method as defined by claim 11,

wherein the coordinate-value calculation step comprises

a step of obtaining an inverse vector of a bound vector that

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indicates a coordinate position of the converted coordinate value within the color space, as the coordinate value forming the complementary color pair, and

wherein the correction step comprises a step of correcting the input-output characteristic data, using the obtained inverse vector as a correction value.

13. The image processing method as defined by claim 11,

wherein the coordinate-value calculation step comprises a step of obtaining a coordinate position of an externally dividing point that forms a coordinate position of the coordinate value forming the complementary color pair, based on a distance between a coordinate position of the converted coordinate value in the conversion step and a given origin within the color space, as the coordinate value forming the complementary color pair, and

wherein the correction step comprises a step of correcting the input-output characteristic data, as a corrected value for the coordinate position of the obtained externally dividing point.

14. The image processing method as defined by claim 11,

wherein gamma (4(0) correction, as correction of the input-output characteristic data based on the coordinate value forming the complementary color pair, is performed in the correction step. (17, 33 - 18,5)

15.   The image processing method as defined by claim 11,

wherein correction of a color reproduction region, as

correction of the input-output characteristic data based on the

coordinate value forming the complementary color pair, is

5   performed in the correction step.

16.   The image processing method as defined by claim 11,

wherein the coordinate-value calculation step comprises

a step of obtaining coordinate values of a plurality of

10   complementary color pairs for each given grayscale unit.

17.   A program embodied on an information storage medium or

in a carrier wave, which is a program for correcting a color

of a presentation image and displaying the presentation image,

15   adapting to a visual environment, the program implementing in

a computer:

visual environment detection means which detects the

visual environment within a display region of the presentation

image, and creates visual environment information;

20   colored-light information processing means which

converts the visual environment information into a coordinate

value within a given color space, and obtains a coordinate value

forming a complementary color pair with the converted

coordinate value, based on a coordinate value within the given

25   color space of the given color within a given reference

environment and the converted coordinate value;

correction means which corrects input-output

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characteristic data for display that is used by means of displaying the image, based on the obtained coordinate value forming the complementary color pair; and

means which controls a display means to display the presentation image, based on the corrected input-output characteristic data.

18.   The program as defined by claim 17,

wherein the correction means performs gamma correction as correction of the input-output characteristic data, based on the coordinate value forming the complementary color pair.

19.   The program as defined by claim 18,

wherein the display region is a region on a screen, and

wherein the display means comprises projection means which projects the presentation image towards the screen.

20.   The program as defined by claim 19,

wherein the visual environment detection means detects a visual environment that takes into account at least a type of screen.

21.   The program as defined by claim 20,

wherein the visual environment detection means detects a visual environment that takes into account at least ambient light.